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## ABSTRACT OF THE DISCLOSURE

A fault on the generator can be detected with the use of a simple arrangement. The output of the generator 12 which has multi-phase winding and is driven by an engine 11 is rectified and then converted by an inverter 133 into an alternating current at the frequency of a system before interconnected to the source of the system. After the engine 11 is started, the direct current voltage Vdc is monitored with a first fault monitor 40. When the direct current voltage Vdc rises up to a predetermined level, a connector relay 135 is closed. As the output of the inverter 133 is increased, the interconnection with the system source is enabled. After the interconnection, the direct current voltage and the output of the inverter are monitored with a second fault monitor 43. If the direct current voltage drops down to below the predetermined level before the output of the inverter reaches a rated level, the canceling and re-interconnection is repeated. Then, when the direct current voltage remains below the predetermined level after the re-interconnection, it is judged that the generator 12 has a fault such as a line breakage in the windings disconnection.

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